

09/346,194

MS126578.01/MSFTP238US

**REMARKS**

Claims 2-17, 19-26 and 28-39 are currently pending in the subject application and are presently under consideration. A version of all pending claims is found at pages 2-8. Claim 30 has been amended herein to correct minor informalities. Favorable consideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 30-39 Under 35 U.S.C. §112**

Claims 30-39 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Withdrawal of this rejection is respectfully requested in view of the amendments made to independent claim 30.

**II. Rejection of Claims 2-3, 23-26 and 28 Under 35 U.S.C. §103(a)**

Claims 2-3, 23-26 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okita *et al.* (US 6,225,998 B1) in view of Bacon *et al.* (US 6,430,538 B1). This rejection should be withdrawn for at least the following reasons. Okita *et al.* and Bacon *et al.*, either alone or in combination, fail to teach or suggest each and every limitation set forth in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) *must teach or suggest all the claim limitations*. See MPEP §706.02(j). The *teaching or suggestion to make the claimed combination* and the reasonable expectation of success *must be found in the prior art and not based on the Applicant's disclosure*. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

09/346,194

MS126578.01/MSFTP238US

The invention as claimed relates to a computing workflow system having process definitions represented in a workflow table. Independent claims 2 and 23 recite similar claim limitations, namely: *the creation of both a data table and a workflow table in a server database; the workflow table and the data table so created are associated with each other*. Further, the workflow table, in addition to being associated with the data table, also contains workflow rules and associated code defined by script functions, the workflow rules and associated code being organized into rows within the workflow table. Thus, upon receipt of a data modification request in the server database, the computer system on which the claimed invention executes, invokes a *workflow engine* that utilizes *server database triggers* to evaluate a condition and *execute an action for at least one workflow step*. Neither Okita *et al.* nor Bacon *et al.* teach or suggest all of these novel aspects of the invention as claimed.

Okita *et al.* relates to a system, method, and article of manufacture for displaying visual primitives of a transaction through a transaction processing system. *See* Abstract. The Examiner incorrectly contends that Okita *et al.* discloses creating a data table in a server database at col. 4, line 64-col. 5 line 8; col. 4, lines 54-64; and col. 5, lines 27-41. However, applicants' representative asserts that the cited passages fail to provide *creating a data table in a server database* as recited in the subject claims. Rather, the cited passages teaches compilation of workflow diagrams to create a routing table - the routing table comprising routing instructions and routing procedures. This is distinct from a *data table* as recited in the subject claims. Exactly where and how the resultant routing tables are stored is not disclosed in the paragraphs cited by the Examiner, but nevertheless it is evident that the routing table is not created in the server database. Thus, it is clear that while Okita *et al.* may create a table, the table that is created is not a *data table*, and further, the table created is not created *in a server database*.

The Examiner further contends that Okita *et al.* discloses *creating a workflow table in the server database*, at col. 4, line 64-col. 5, line 8; col. 4, lines 54-64; and col. 12, lines 12-23. As stated above, such paragraphs (also including col. 12, lines 12-23) disclose the creation of a *routing table*. The Examiner, by referring applicants' representative back to the identical passages that were initially utilized in an attempt to assert that Okita *et al.* taught or suggested the creation of a *data table in a server*

09/346,194

MS126578.01/MSFTP238US

*database*, now seems to intimate that the same passages also provide for the creation of a second table, *a workflow table*. However, these cited passages only disclose the creation of a single table – the *routing table*. Okita *et al.* is silent regarding the creation of a second table – the *workflow table*, and is further silent regarding both the creation of a workflow table *in the server database*, and *associating the workflow table and the previously created data table*. Moreover, Okita *et al.* fails to teach or suggest the fact that the workflow table that is created in the server database comprises rows where each row of the workflow table represents a workflow step containing workflow rules and associated code defined by script functions.

The Office Action also asserts that Okita *et al.* teaches a *data modification request in the server database*, and indicates that this feature may be found in Figure 2; col. 5, lines 27-41; and col. 4, line 64-col. 5, line 8. Figure 2 depicts “a system diagram that illustrates a system architecture compatible with the present invention.” See col. 2, lines 27-28. Col. 5, lines 27-41, provides in summary, that an Application Workflow Editor (AWE) communicates with an object management client to obtain configuration information. The object management client in turn communicates with an object management server that contains information about one or more call processing devices or call processing systems *via a communications link*. The object management server additionally permits control and management of one or more call processing devices. In addition, col. 4, line 64-col. 5, line 8, provides that an Application Workflow Editor (AWE) - capable of generating, editing, and displaying various types of workflows that define the operation of a transaction processing system - provides a workflow diagram containing the visual primitives of a transaction flow through a transaction processor. The AWE supplies the workflow diagram to either a serializer or a CCT compiler for compilation into a series of routing instructions or routing procedures, and the resultant routing instructions or procedures are stored in a routing table such as a call control table (CCT). It is submitted that the passages indicated by the examiner fail to teach or suggest *a data modification in the server database*. At best, all that Okita *et al.* teaches at the indicated paragraphs is that a workflow diagram is compiled into a series of routing instructions or routing procedures by a CCT compiler; there is no mention of *data modification in the server database* as recited in the subject claims.

09/346,194

MS126578.01/MSFTP238US

In addition the Office Action contends that Okita *et al.* provides *invoking a workflow engine using server database triggers* at col. 4, lines 54-64; col. 12, lines 12-23; Figure 2; and col. 5, lines 27-41. Applicants' representative avers to the contrary. Okita *et al.* at col. 4, lines 54-64 discloses an *application workflow editor* not a *workflow engine*. An *engine*, as universally recognized in the art, is a program that performs a core or essential function for other programs; i.e. the engine coordinates the overall operation of other programs. An *editor*, on the other hand, is a standalone computer program that lets a user enter, change and store data. In conformance with the generally accepted connotation of engine, the invention as claimed utilizes a workflow engine to invoke a script engine, compare data change information with a workflow definition contained in a workflow table that has been loaded into the workflow engine, determine the appropriate step that needs to be executed, check the appropriate execution permissions on that step, and if execute permission is granted, evaluate the step condition, and if the step condition is true, execute the step action. See page 10, lines 16-26. Okita *et al.* on the other hand, provides a workflow editor that provides a workflow diagram containing visual primitives of a transaction flow through a transaction processor to either a serializer or a CCT compiler. Apart from generating, editing and displaying various types of workflows that define the operation of a transaction processing system, the workflow editor, as described in Okita *et al.*, does nothing more than provide a workflow diagram to a serializer or a CCT compiler.

It is clear, and in contrast to applicants' *workflow engine*, that the *workflow editor* disclosed in Okita *et al.* is a peripheral process that fails to coordinate operation of other programs. Further, the Examiner asserts that the workflow editor provided by Okita *et al.* uses server database triggers. Applicants' representative however can find no reference within the passages indicated by the Examiner that discloses the fact that the workflow editor utilizes *server database triggers*. Rather, it is apparent that Okita *et al.* uses *event triggers*, as distinct from *server database triggers*. According to Okita *et al.* event triggers initiate workflows and the event trigger also associates a particular event with one or more workflows. See col. 10, lines 55-57. Thus, it is clear that Okita *et al.* fails to teach or suggest *invoking a workflow engine using server database triggers*.

Further, the Examiner concedes that Okita *et al.* fails to teach or suggest the

09/346,194

MS126578.01/MSFTP238US

limitation of *receiving a data modification request in the server database*, and asserts that Bacon *et al.* discloses this particular limitation. Applicants' representative contends that while Bacon *et al.* may provide "logic to receive the participant entered data and to modify the work item ... and logic to provide the modified work item to the to the server ..." See claim 2, Bacon *et al.* fails to receive a data modification request *in the server database*. Thus, for reasons stated above with respect to Okita *et al.*, Bacon *et al.* also fails to teach or suggest the limitations as recited in the subject claims.

Accordingly, since Okita *et al.* fails to teach or suggest a substantial proportion of the limitations recited in the subject claims, and Bacon *et al.* fails to rectify any of those deficiencies, let alone the deficiency for which the Examiner specifically cited Bacon *et al.* it is requested that this rejection be withdrawn with respect to independent claims 2 and 23 (and associated dependent claims).

### **III. Rejection of Claims 17, 19 and 20 Under 35 U.S.C. §103(a)**

Claims 17, 19 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okita *et al.* in view of Rosenthal *et al.* (US 6,311,192 B1), and further in view of Hoffecker *et al.* (US 5,325,505). It is respectfully requested that this rejection be withdrawn for at least the following reasons. Okita *et al.*, Rosenthal *et al.* and Hoffecker *et al.*, individually and/or in combination, fail to teach or suggest all the limitations set forth in the subject claims.

Independent claim 17 recites: *a server database ... wherein the system further includes workflow triggers defined on the data table*. The Examiner claims that Okita *et al.* teaches this particular limitation. However, as discussed above regarding independent claims 2 and 23, Okita *et al.* fails to disclose the use of a *data table* but rather discloses a *routing table*. In addition, as has also been discussed *supra*, Okita *et al.* further fails to provide for *workflow triggers defined on the data table*. Rather Okita *et al.* discloses *event triggers* at col. 10, lines 55-62, but these event triggers are not *defined on the data table*. All that Okita *et al.* discloses in the indicated paragraph is that the event triggers initiate workflows and that an event trigger associates a particular event with one or more workflows.

The instant Final Office Action further asserts that Okita *et al.* discloses a

09/346,194

MS126578.01/MSFTP238US

*workflow extended store communicatively coupled to the server database*, at col. 12, lines 12-23 and col. 4, lines 54-64. Col. 12, lines 12-23, in summary relates a particular embodiment of Okita *et al.* wherein an expression evaluation step allows the performance of arithmetic or Boolean operations; and col. 4, lines 54-64 pertain to Figure 2, a diagram of an exemplary organization of a transaction processing system that can be used with Okita *et al.*'s invention. While applicants' representative perceives both a Call Center Database (212) and a Local Storage Device (210), the two are not communicatively coupled. Rather it appears from Figure 2 that the Local Storage Device (210) is coupled to a serializer (202). There is no coupling between the Call Center Database (212) and the Local Storage Device (210) of any sort. Thus, applicants' representative submits that Okita *et al.* fails to teach or suggest *a workflow extended store communicatively coupled to the server database*.

Further in the instant Final Office Action, the Examiner intimates that Okita *et al.* provides *a script engine communicatively coupled to the workflow engine*, at col. 12, lines 12-23 and col. 11, lines 50-51. As has been stated above, col. 12, lines 12-23 discloses a particular embodiment of Okita *et al.* wherein an expression evaluation step allows the performance of arithmetic or Boolean operations. Col 11, lines 50-51, states: "a step can have a property editor that allows the input of a script of commands or the launch of another visual programming environment." Applicants' representative fails to perceive within the indicated passages either a *script engine* or a *workflow engine*, as would be generally understood by one ordinarily skilled in the art. Consequently, since the indicated passages fail to provide both a script engine and a workflow engine, it is inconceivable to applicants' representative's mind how a non-existent script engine and workflow engine can be communicatively coupled to one another. Thus, it is submitted that Okita *et al.* fails to teach or suggest this novel feature of the invention as claimed.

In addition, Okita *et al.* also fails to teach or suggest *wherein the workflow triggers analyze a data modification request submitted to the data table and invoke the extended store and a workflow engine communicatively coupled to the server database, to the workflow extended store, and to the workflow table*, and the Examiner has failed to address these exemplary aspects of the applicants' claimed invention.

Nevertheless, the Examiner further attempts to use Rosenthal *et al.* and Hoffecker

09/346,194

MS126578.01/MSFTP238US

*et al.* to cure certain select deficiencies rendered by Okita *et al.* In particular, the Examiner attempts to utilize Rosenthal *et al.* to cure Okita *et al.*'s failure to disclose a server database including a data table and an associated workflow table; and Hoffecker *et al.* to rectify Okita *et al.*'s failure to divulge a workflow extended store coupled to the server database. Rosenthal *et al.* discloses a workflow engine initiating workflows from scenario tables and scenario attribute tables, but fails to even suggest a server database including a data table and an associated workflow table. In fact Rosenthal *et al.* at col. 9, lines 28-32, states: "The SUBMIT routine interacts with the two tables which are indicated diagrammatically at 53 in FIG. 1. The first of these tables is a scenario table ... . The second of these two tables is the scenario attributes table ... ." Scrutiny of FIG. 1 indicates that the two tables alluded to in Rosenthal *et al.* do not reside in the server database, i.e. the server database does not include the two tables. Rather it would appear that the two tables reside between the SAP component and the database component in a supplemental routine. Clearly then, Rosenthal *et al.* therefore does not disclose a server database including a data table and an associated workflow table as recited in the subject claims.

With respect to the teachings of Hoffecker *et al.* On page 6 of the Final Office Action dated August 13, 2004, the Examiner states "As to claim 17, Okita teaches a workflow system comprising: a workflow extended store communicatively coupled to the server database (Col. 12, lines 12-23, Col 4, lines 54-64)". Yet, on page 7 of the instant Final Office Action, the Examiner states: "Okita fails to explicitly teach a workflow extended store communicatively coupled to the server database." Nevertheless, as to the prior assertion, please see the discussion above as to why Okita *et al.* explicitly fails to teach or suggest this particular limitation. With regard to the latter assertion, applicants' representative agrees with the examiner that it is common knowledge to couple an extended store with a server database, and that col. 1, lines 28-30 of Hoffecker *et al.* is illustrative of this common perception. However, while it may be common knowledge to couple an extended store with a server database, it is not commonly known by persons skilled in the art to couple a workflow extended store to the server database in such a way that the workflow triggers analyze a data modification request submitted to the data table and invoke the extended store. Consequently it is submitted, neither Okita *et al.* nor

09/346,194

MS126578.01/MSFTP238US

Hoffecker *et al.* disclose this exemplary feature of the invention as claimed.

In view of at least the foregoing, it is submitted that Okita *et al.*, Rosenthal *et al.* and Hoffecker *et al.*, either alone or in combination, fail to teach or suggest all the limitations set forth in the subject claims. Accordingly, it is respectfully requested that this rejection be withdrawn with respect to independent claim 17 and those claims that depend there from.

**IV. Rejection of Claims 21 and 22 Under 35 U.S.C. §103(a)**

Claims 21 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okita *et al.* in view of Rosenthal *et al.*, further in view of Hoffecker *et al.* and further in view of Flores *et al.* (US 6,073,109). Claims 21 and 22 depend from claim 17, and as discussed *supra*, Okita *et al.*, Rosenthal *et al.* and Hoffecker *et al.* fail to teach or suggest all the limitations recited in independent claim 17, and further it is submitted that Flores *et al.* fails to make up for the aforementioned deficiencies. Accordingly, withdrawal of this rejection with respect to claims 21 and 22 is respectfully requested.

**V. Rejection of Claims 4-16 and 29-39 Under 35 U.S.C. §103(a)**

Claims 4-16 and 29-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gabbita *et al.* (US 6,349,238 B1) in view of Du *et al.* (US 6,078,982). Withdrawal of this rejection respectfully requested for at least the following reasons. Gabbita *et al.* and Du *et al.*, neither alone nor in combination, teach or suggest each and every limitation set forth in the subject claims.

As has been stated above, the claimed invention relates to a computing workflow system having process definitions represented in a workflow table. Independent claim 30, as amended, recites: *a workflow enabled data table that includes workflow triggers; a workflow table that includes workflow rules and associated code; a workflow extended store coupled to the workflow enabled data table and the workflow table, the workflow extended store includes extended store procedures; a workflow engine coupled to the workflow enabled data table, the workflow table and the workflow extended store; and a script engine coupled to the workflow engine.* In addition, independent claims 4, 11 and 29 recite similar limitations.



09/346,194

MS126578.01/MSFTP238US

Gabbita *et al.* relates to a workflow management system for managing and tracking new telecommunications Service Orders from order entry through provisioning and testing. See col. 1, lines 12-14. The Examiner cites Gabbita *et al.* as providing substantially all the limitations presented in the subject claims. However, applicants' representative avers, no matter how scrupulously the cited document is scrutinized, that Gabbita *et al.* fails to teach or suggest any of those limitations upon which the cited document is relied upon to teach. In particular, the Examiner relies upon Gabbita *et al.*, col. 4, lines 56-64 as disclosing a *workflow enabled data table*, however Gabbita *et al.* at the indicated passage states: "A database management system (DBMS) 104 (also referred to herein as "database" 104"), is coupled to LSAT 102. The database 104 is used by LSAT 102 to *store data associated with the processing and tracking of orders.*" *Id.* (emphasis added). It is submitted that this does not disclose a *workflow enabled data table*, but rather just a repository of data associated with the processing and tracking of orders, i.e. not a table of workflow enabled data.

The Examiner also relies on Gabbita *et al.*, col. 21, lines 52-60, to provide a *workflow table that includes workflow rules and associated code*. Though applicants' representative agrees that a workflow table that includes workflow rules is disclosed therein, it is submitted that col. 21, lines 52-60 fails to provide a *workflow table* that also includes *associated code*.

Further, the Examiner claims that Gabbita *et al.* discloses a *workflow extended store coupled to the workflow enabled data table and the workflow table, the workflow extended store includes extended store procedures*, at Figs. 1A, 1B and 6, and col. 4, lines 56-64 and col. 5, lines 20-48. Since, as has been argued above, Gabbita *et al.* fails to provide a *workflow enabled data table*, and the workflow table that is disclosed in Gabbita *et al.* is deficient in failing to provide that the workflow table includes not only workflow rules but also associated code, it is clear that Gabbita *et al.* cannot provide a *workflow extended store coupled to the workflow enabled data table and the workflow table, the workflow extended store includes extended store procedures*. Moreover, the figures and passages indicated by the Examiner fail to reveal the substance of these limitations.

In addition, the Examiner asserts that Gabbita *et al.* divulges a *workflow engine*

09/346,194

MS126578.01/MSFTP238US

*coupled to the workflow enabled data table, the workflow table and the workflow extended store.* Applicants' representative contends however, that given Gabbita *et al.*'s failure, as discussed *supra*, to provide: (i) a workflow enabled data table; and (ii) a workflow table that includes not only workflow rules but also associated code, that Gabbita *et al.* fails to provide all a workflow engine coupled to the workflow enabled data table, the workflow table and the workflow extended store as the limitations recited in the subject claims.

Moreover, the Examiner asserts that Gabbita *et al.* provides a *script engine coupled to the workflow engine*, at col. 4, lines 56-64, col. 5, lines 20-48 and col. 21, lines 52-60. While applicants' representative perceives one engine, the LSAT engine, within the cited paragraphs, it is contended that the indicated passages fail to provide a second engine with which the first engine can be coupled to. Consequently, it is submitted that since Gabbita *et al.* apparently discloses only a single engine, that the cited document fails to teach or suggest the substance of this particular limitation, i.e. a script engine coupled to the workflow engine..

In the instant Final Office Action, the Examiner concedes that Gabbita *et al.* fails to explicitly teach workflow triggers coupled to the data table and extended store, and indicates that Du *et al.* rectifies this lack of teaching. It is submitted however, that the teaching of Du *et al.* is moot in view of the amendment made to independent claim 30, and further in light of the fact that Du *et al.* fails to make up for the aforementioned deficiencies presented by Gabbita *et al.* with respect to the other limitations presented in the subject claims.

In view of at least the foregoing therefore, it is submitted that Gabbita *et al.* and Du *et al.*, either alone or in combination, fail to teach or suggest all the limitations set forth in the subject claims, and that this rejection should be with drawn with respect to independent claims 4, 11, 29 and 30 (and claims that depend there from).

09/346,194

MS126578.01/MSFTP238US

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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